

US EPA ARCHIVE DOCUMENT

# EPA Greenhouse Gas Reporting Program and Publication Tool Overview



# GHGRP Overview



*Goal of GHGRP: To collect accurate GHG data to inform future policy decisions*

- Rule covers 41 source categories for reporting, accounting for 85-90% of U.S. GHG emissions.
  - Monitoring began in 2010 for 29 source categories.
  - 1<sup>st</sup> reporting deadline was September 30, 2011.
  - An additional 12 source categories began collecting data in 2011 to report in 2012.
- Reporting only, no control or use requirements.



# GHGRP vs. U.S. GHG Inventory



- The U.S. GHG Inventory is a comprehensive top-down assessment of national GHG emissions and removals which presents emissions across multiple years starting in 1990.
  - U.S. GHG emissions calculated using internationally-accepted methods and nationally appropriate statistics
  - Emissions estimates not provided at the geographic or facility level
  - Includes small industrial emitters, residential and commercial sectors
  - Includes agriculture and land-use/forestry sectors
- When compared in aggregate, some of the summary emissions totals for specific industries appear different in the Inventory and GHGRP.
  - Different Source Category Definitions
  - Reporting Threshold
  - Lack of Disaggregated Data to Represent Certain Industries
  - Use of Continuous Emissions Monitoring Technologies
  - Differences in use of Default International Factors from Facility-Specific Methods

# Uses of GHG Data



- Provide comprehensive and comparable GHG data to external stakeholders for a variety of purposes:
  - Enable industries to compare their emissions to similar facilities and identify emissions reductions strategies.
  - Provide states and localities with GHG emissions data from facilities within their borders and to compare with emissions in other areas.
  - Educate the public about large sources of GHG's
  - Make GHG data available to the financial community leading to more informed investment decisions.
  - Provide detail on GHG emissions by gas, sector, and location that can be used by the research community.
  - Inform policy decisions at the local, state or other level.
- Establish a baseline for facilities to track emissions over time.
- Help identify industry leaders.

# GHGs Reported



- CO<sub>2</sub>
- CH<sub>4</sub> (methane)
- N<sub>2</sub>O (nitrous oxide)
- Fluorinated GHGs
  - HFCs (hydrofluorocarbons)
  - PFCs (perfluorocarbons)
  - SF<sub>6</sub> (sulfur hexafluoride)
  - Other fluorinated gases (except CFC and HCFC and gases <1 mm Hg @25° C)



# Source Categories for 2010



- Adipic Acid Production (Subpart E)
- Aluminum Production (Subpart F)
- Ammonia Manufacturing (Subpart G)
- Cement Production (Subpart H)
- Electricity Generation (Subpart D)
- Ferroalloy Production (Subpart K)
- General Stationary Fuel Combustion Sources (Subpart C)
- Glass Production (Subpart N)
- HCFC-22 Production HFC-23 Destruction (Subpart O)
- Hydrogen Production (Subpart P)
- Iron and Steel Production (Subpart Q)
- Lead Production (Subpart R)
- Lime Manufacturing (Subpart S)
- Manure Management Systems (Subpart JJ) *[EPA will not be implementing subpart JJ due to a Congressional restriction prohibiting the expenditure of funds for this purpose.]*
- Municipal Solid Waste Landfills (Subpart HH)
- Miscellaneous Uses of Carbonates (Subpart U)
- Nitric Acid Production (Subpart V)
- Petrochemical Production (Subpart X)
- Petroleum Refineries (Subpart Y)
- Phosphoric Acid Production (Subpart Z)
- Pulp and Paper Manufacturing (Subpart AA)
- Silicon Carbide Production (Subpart BB)
- Soda Ash Production (Subpart CC)
- Suppliers of Coal-based Liquid Fuels (Subpart LL)
- Suppliers of Petroleum Products (Subpart MM)
- Suppliers of Natural Gas and Natural Gas Liquids (Subpart NN)
- Suppliers of Industrial Greenhouse Gases (Subpart OO)
- Suppliers of Carbon Dioxide (Subpart PP)
- Titanium Dioxide Production (Subpart EE)
- Zinc Production (Subpart GG)



# New Source Categories for 2011

The twelve new source categories for reporting year 2011 and beyond include:

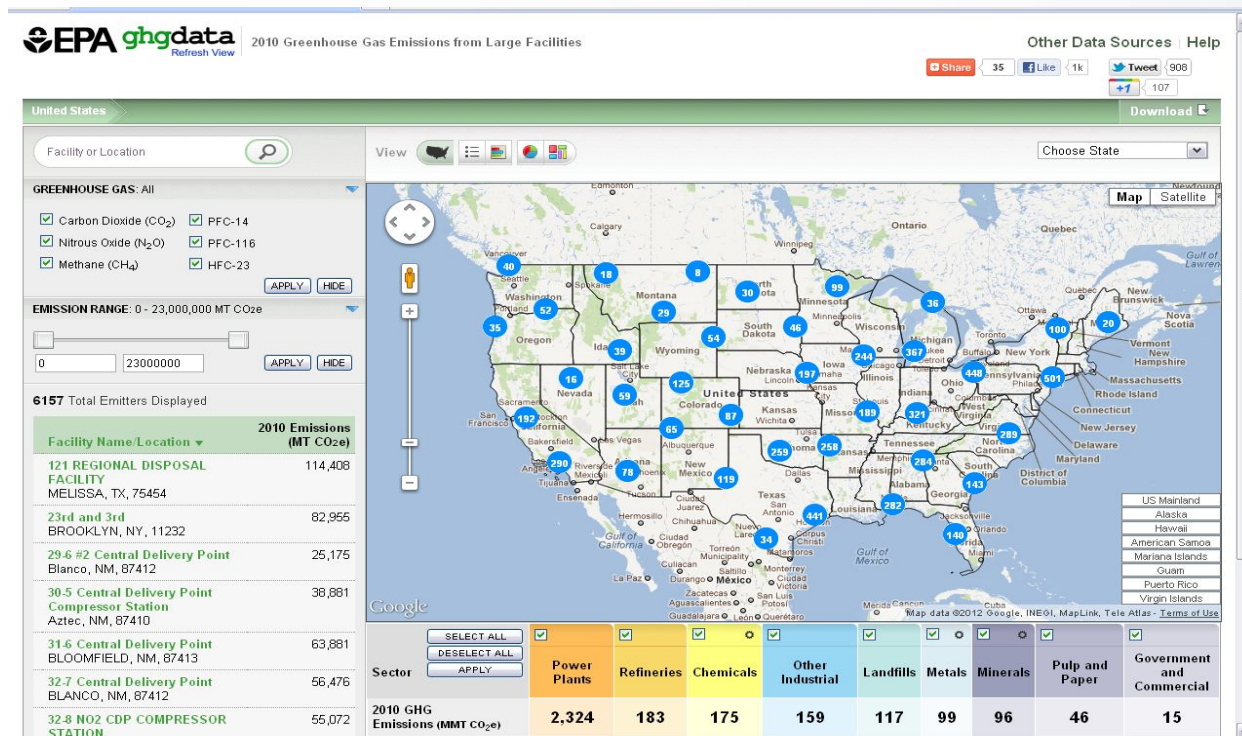
- Electronics Manufacturing (Subpart I)
- Fluorinated Gas Production (Subpart L)
- Magnesium Production (Subpart T)
- Petroleum and Natural Gas Systems (Subpart W)
- Use of Electric Transmission and Distribution Equipment (Subpart DD)
- Underground Coal Mines (Subpart FF)
- Industrial Wastewater Treatment (Subpart II)
- Imports and Exports of Equipment Pre-charged with Fluorinated GHGs or Containing Fluorinated GHGs in Closed-cell Foams (Subpart QQ)
- Carbon dioxide injection and geologic sequestration (Subpart RR)
- Manufacture of electric transmission and distribution (Subpart SS)
- Industrial waste landfills (Subpart TT)
- Injection of carbon dioxide (Subpart UU)



# Data Publication



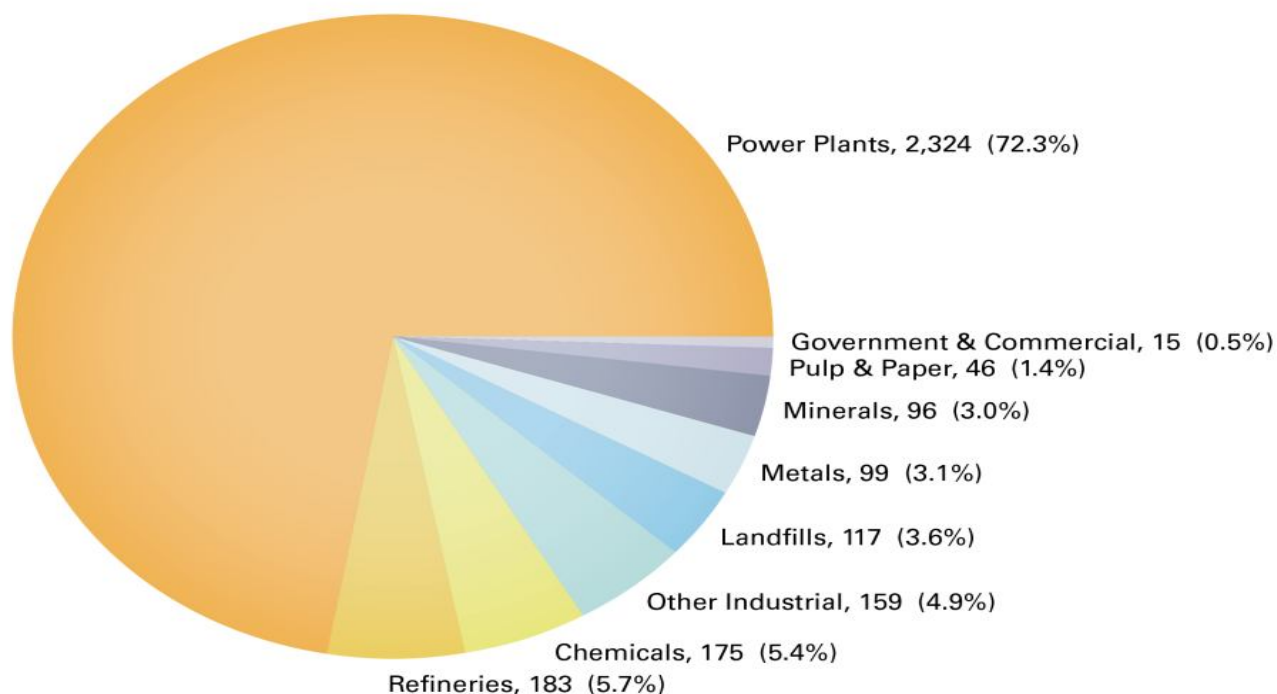
- <http://GHGdata.epa.gov/ghgp/main.do>
- Data publication tool allows stakeholders and the public to access the key data elements quickly and easily and to sort data by location, sector, and by gas.
- 2010 data published in January 2012.



# Snapshot-2010 Data



**Breakdown of Reported GHG Emissions (MMT CO<sub>2</sub>e) from Stationary Sources by Industry Type - 2010\***



All data is as reported by facilities on 12/16/11.

This figure shows total reported GHG emissions by industry type reported to the Greenhouse Gas Reporting Program (GHGRP) in 2010. Note this figure does not represent total U.S. emissions, and percentages only imply the percent of total emissions reported by facilities in the GHGRP. The GHGRP covers the vast majority of U.S. emissions from the electric power and industrial sectors.

\*Emissions from the transportation, residential, commercial and agricultural sectors are not reflected in these totals.

# 2010 GHG Data Quick Summary



- Reports from over 6,700 entities
- Power plants are largest stationary source of direct emissions- 2,324 MMTCO<sub>2</sub>e
- Refineries are second at 183 MMTCO<sub>2</sub>e
- 100 facilities reported over 7 MMTCO<sub>2</sub>e including 96 power plants, 2 iron and steel mills, 2 refineries
- 2010 data accounts for roughly 80 percent of total U.S. emissions.
  - This percentage reflects both upstream suppliers and direct emitters.
  - Among the data not covered are GHG emissions from smaller sources, and from agricultural and land-use activities.

# Looking Ahead



| Milestone  | Date            |
|--|-----------------|
| Reporting Year 2010 Publication  | January 2012    |
| Launch e-GGRT for Reporting Year 2011  | February 2012   |
| Reporting Deadline for Reporting Year 2011 (Track 1)   | April 2012      |
| Preliminary Data Verification  | April-June 2012 |
| Release Track 1 facility-level data (file for download only)   | Summer 2012     |
| Reporting Deadline for Track 2   | September 2012  |
| Preliminary Data Verification  | Oct.-Dec. 2012  |
| Reporting Year 2011 Publication (all data released using updated online software to reflect stakeholder input, accommodate new sources, display sector totals, trend data, etc.) | January 2013    |

# Additional Information



GHGRP: <http://www.epa.gov/climatechange/emissions/ghgrulemaking.html>

GHG data publication: <http://ghgdata.epa.gov/ghgp/main.do>